

Amendments to the Specification

Please amend the paragraph beginning at page 5, line 7 with the following amended paragraph:

The invention also relates to a pharmaceutical composition that includes a pharmaceutically acceptable carrier and an amount of a vitamin K-dependent polypeptide effective to inhibit clot formation in a mammal. The vitamin K-dependent polypeptide includes a modified GLA domain that enhances membrane-binding affinity of the polypeptide relative to a corresponding native vitamin K-dependent polypeptide. In some embodiments, activity of the polypeptide also is enhanced. The modified GLA domain includes at least one amino acid substitution. The vitamin K-dependent polypeptide may be, for example, protein C, activated protein C or active site modified factor VIIa, protein S, or active site modified factor IXa. The ~~composition~~ composition can include an anticoagulant agent (e.g. aspirin).

Please replace the paragraph beginning at page 8, line 10 with the following amended paragraph:

Figure 15 depicts the membrane interaction properties of different vitamin K-dependent proteins. ~~Panel A~~ The top panel compares membrane interaction of human (filled circles) and bovine (open circles) Factor X. ~~Panel B~~ The middle panel shows membrane interaction by normal bovine prothrombin fragment 1 (open circles), fragment 1 modified with TNBS in the absence of calcium (filled circles) and fragment 1 modified with TNBS in the presence of 25 mM calcium (filled squares). ~~Panel C~~ The bottom panel shows the rate of protein Z binding to vesicles at pH 9 (filled circles) and 7.5 (open circles).

Please replace the paragraph beginning at page 45, line 9 with the following amended paragraph:

The results in ~~Figure 15C~~ the bottom panel of Figure 15 show that the association rate for protein Z was substantially improved at pH 9, where an amino terminal should be uncharged. The rate constant obtained from these data was about 12-fold higher at pH 9 than at pH 7.5 (~~Figure 15C~~).